

1. The first step is to identify the problem or question that needs to be addressed. This involves understanding the context and the specific requirements of the task.

1            2.        The method of claim 1, wherein the data is loaded from a relational data store.

1           4.       The method of claim 1, further comprising enabling multiple users to share access  
2       to the in-memory database table.

1           5.       The method of claim 1, further comprising dropping the in-memory database table  
2   upon receipt of a drop table command.

1           6.       The method of claim 1, further comprising dropping the in-memory database table  
2   upon system shutdown.

1           7.       The method of claim 1, further comprising providing a syntax for creating the in-  
2   memory database table.

1           8.       The method of claim 1, further comprising limiting access to the in-memory  
2   database table.

1           9.       An apparatus for storing data, comprising:  
2           a computer having a memory and connected to a data store;  
3           one or more computer programs, performed by the computer, for creating a persistent in-  
4           memory database table and loading data into the in-memory database table.

1           10.     The apparatus of claim 9, wherein the data is loaded from a relational data store.

1           11.     The apparatus of claim 9, wherein the in-memory database table is user-defined.

1           12.     The apparatus of claim 9, further comprising enabling multiple users to share  
2 access to the in-memory database table.

1           13.     The apparatus of claim 9, further comprising dropping the in-memory database  
2 table upon receipt of a drop table command.

1           14.     The apparatus of claim 9, further comprising dropping the in-memory database  
2 table upon system shutdown.

1           15.     The apparatus of claim 9, further comprising providing a syntax for creating the  
2 in-memory database table.

1           16.     The apparatus of claim 9, further comprising limiting access to the in-memory  
2 database table.

1           17.     An article of manufacture comprising a program storage medium readable by a  
2 computer and embodying one or more instructions executable by the computer to store data in a  
3 memory of a computer, comprising:  
4           creating a persistent in-memory database table; and  
5           loading data into the in-memory database table.

1           18.     The article of manufacture of claim 17, wherein the data is loaded from a relational  
2 data store.

1 19. The article of manufacture of claim 17, wherein the in-memory database table is  
2 user-defined.

1 20. The article of manufacture of claim 17, further comprising enabling multiple users  
2 to share access to the in-memory database table.

1 21. The article of manufacture of claim 17, further comprising dropping the in-memory  
2 database table upon receipt of a drop table command.

1 22. The article of manufacture of claim 17, further comprising dropping the in-memory  
2 database table upon system shutdown.

1 23. The article of manufacture of claim 17, further comprising providing a syntax for  
2 creating the in-memory database table.

1 24. The article of manufacture of claim 17, further comprising limiting access to the  
2 in-memory database table.

1 25. A method of locating data in a memory of a computer, comprising:  
2 receiving a search request specifying a number of results to be retrieved from a desired  
3 starting point;  
4 locating the data in an in-memory database table; and  
5 returning the specified number of results from a desired starting point.

1 26. The method of claim 25, further comprising parsing the search request to identify  
2 search terms.

1 27. The method of claim 26, further comprising locating stored descriptors that  
2 correspond to the search terms using a high speed index.



1 38. The apparatus of claim 37, further comprising using the location information to  
2 retrieve data.

1 39. The apparatus of claim 38, wherein the data is retrieved from a data area of the in-  
2 memory database table.

1 40. The apparatus of claim 38, wherein the data is retrieved from a relational data store.

1 41. The apparatus of claim 34, wherein the results are in pre-sorted order.

1 42. The apparatus of claim 34, wherein the results are pre-joined.

1 43. An article of manufacture comprising a program storage medium readable by a  
2 computer and embodying one or more instructions executable by the computer to locate data in  
3 a memory of a computer, comprising:

4 receiving a search request specifying a number of results to be retrieved from a desired  
5 starting point;

6 locating the data in an in-memory database table; and

7 returning the specified number of results from a desired starting point.

1 44. The article of manufacture of claim 43, further comprising parsing the search  
2 request to identify search terms.

1 45. The article of manufacture of claim 44, further comprising locating stored  
2 descriptors that correspond to the search terms using a high speed index.

1 46. The article of manufacture of claim 45, further comprising mapping the stored  
2 descriptors to location information in a header area of the in-memory database table.

1            47.    The article of manufacture of claim 46, further comprising using the location  
2    information to retrieve data.

1           48.     The article of manufacture of claim 47, wherein the data is retrieved from a data  
2     area of the in-memory database table.

1           49.    The article of manufacture of claim 47, wherein the data is retrieved from a  
2   relational data store.

1            50.     The article of manufacture of claim 43, wherein the results are in pre-sorted order.

1            51.     The article of manufacture of claim 43, wherein the results are pre-joined.

1        52.    A method for retrieving data from an in-memory database table stored at a  
2    computer, comprising:

3 retrieving stored descriptors corresponding to search terms in a search request;  
4 mapping the stored descriptors to location information in a header area of an in-memory  
5 database table; and  
6 using the location information to retrieve data.

53. The method of claim 52, wherein the location information indicates that data to be retrieved is in a data area of the in-memory database table.

1            54.     The method of claim 52, wherein the location information indicates that data to be  
2     retrieved is in a relational data store.

55. An apparatus for retrieving data from an in-memory database table, comprising:  
a computer having a memory storing the in-memory database table, wherein the computer  
is connected to a data store;

one or more computer programs, performed by the computer, for retrieving stored descriptors corresponding to search terms in a search request, mapping the stored descriptors to location information in a header area of an in-memory database table, and using the location information to retrieve data.

56. The apparatus of claim 55, wherein the location information indicates that data to be retrieved is in a data area of the in-memory database table.

57. The apparatus of claim 55, wherein the location information indicates that data to be retrieved is in a relational data store.

58. An article of manufacture comprising a program storage medium readable by a computer and embodying one or more instructions executable by the computer to retrieve data from an in-memory database table stored at a computer, comprising:

- retrieving stored descriptors corresponding to search terms in a search request;
- mapping the stored descriptors to location information in a header area of an in-memory database table; and
- using the location information to retrieve data.

59. The article of manufacture of claim 58, wherein the location information indicates that data to be retrieved is in a data area of the in-memory database table.

60. The article of manufacture of claim 58, wherein the location information indicates that data to be retrieved is in a relational data store.

61. A method of updating data in a memory of a computer, comprising:  
receiving an update request to update data that is accessed via an in-memory database  
table; and  
updating the data accessed via the in-memory database table.

1 62. The method of claim 61, further comprising updating a relational data store.

1 63. The method of claim 61, further comprising updating a high speed index used to  
2 access the in-memory database table.

1 64. The method of claim 63, further comprising modifying stored descriptors in the  
2 high speed index to correspond to updates to the in-memory database table.

1 65. The method of claim 61, further comprising modifying location information of a  
2 header area of the in-memory database table to correspond to updates to the in-memory database  
3 table.

1 66. An apparatus for updating data, comprising:  
2 a computer having a memory and connected to a data store;  
3 one or more computer programs, performed by the computer, for receiving an update  
4 request to update data that is accessed via an in-memory database table and updating the data  
5 accessed via the in-memory database table.

1 67. The apparatus of claim 66, further comprising updating a relational data store.

1 68. The apparatus of claim 66, further comprising updating a high speed index used  
2 to access the in-memory database table.

1 69. The apparatus of claim 68, further comprising modifying stored descriptors in the  
2 high speed index to correspond to updates to the in-memory database table.

1 70. The apparatus of claim 66, further comprising modifying location information of  
2 a header area of the in-memory database table to correspond to updates to the in-memory database  
3 table.



